

Ch 8.2-8.6 Test

8.2 Parallelograms

- Both pairs opp sides \parallel
- " " " " \cong
- " " " \angle s \cong
- Cons. \angle s are suppl.
- Diagonals bis. each other

8.3 Is it a parallelogram?

- use midpt
- def of \square (Both opp sides \parallel)
 - If diagonals bis. each other then \square
 - If both pairs of opp sides \cong then \square
 - If both pairs of opp \angle s \cong then \square
 - If set of opp sides is both \cong & \parallel then \square

8.4 Rectangles

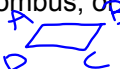
- 5 \square facts
- 4 Rt \angle s
- diag. \cong

8.5 Rhombuses and Squares

Rhombus

- 5 \square facts
 - 4 \cong sides
 - diagonals \perp
 - diagonals bisect opp \angle s
- everything

Given the coordinates of a parallelogram,
is it a rectangle, rhombus, or square?
List all that apply.



Check diagonals

① slope $m = \frac{y_2 - y_1}{x_2 - x_1}$ (\perp - Rhombus)

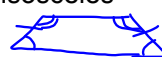
② distance $d = \sqrt{(y_2 - y_1)^2 + (x_2 - x_1)^2}$ (\cong - Rect.)

If Both
Square

8.6 Trapezoids

define exactly one pair \parallel sides

isosceles

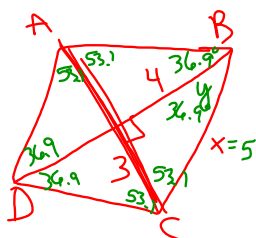


diag. \cong

median

$$\text{med} = \frac{1}{2} (\text{sum of bases})$$

Rhombus



$$x^2 = 4^2 + 3^2$$

$$x = 5$$

$$AC = 6$$

$$BD = 8$$

$$BC = 5$$

Find all \angle s.

$$\cos(y) = \frac{4}{5}$$

$$y \approx 36.9^\circ$$